GRAPHOLAS 14.0

USER MANUAL

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ESKO

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1 Important Note

The CDI needs a constant flow of data for the imaging process. In order to avoid any disturbances, the "Merger" cannot be used during this time.

In most cases, a cancellation of the imaging process causes the loss of the plate for which ESKO cannot be held responsible.

2 System Requirements

The following minimum requirements must be met:

- Intel Dual Core 2 processor
- 2 GB RAM
- network board
- screen resolution of 1280 x 1024 pixels
- CD-ROM drive
- 32bit operating system – 64bit operating system is not supported
- Microsoft Windows XP
- disabled firewall
- disabled UAC (User Account Control)

The index and file names may not include special characters, umlauts or spaces. An underscore "_" is the only permitted special character and can be used as a substitute for a space.

3 Grapholas Service

The following service is automatically installed with Grapholas:

- Esko CDI Service - "bsl_cdisvc"

The Esko CDI Service automatically initialises the CDI when starting the operating system. The calibration of the movable parts is carried out by the Exposer.

There is no indication of the state of the service. When an error occurs, an appropriate error message is displayed.

4 Antivirus Software on CDI Machines

Each CDI is equipped at the factory with the antivirus software "Microsoft Essential". The settings are already selected so that the function of the CDI will not be impaired.

In case the CDI is not connected to the internet, this software must be updated manually.

- Current version of Microsoft Essential:

  http://www.microsoft.com/Security_essentials/default.aspx?mkt=en-gb

- Current version of virus database (update each week):

  http://download.microsoft.com/download/DefinitionUpdates/mpam-fe.exe

In case a different antivirus software is used, the following settings must be checked and adjusted, if needed:

- The directories "C:\bsl\run" and "d:\data" may not be monitored.
- LEN files may not be monitored.
- The processes "cmot.exe", "gravur.dma.exe" and "gravur.job.exe" may not be monitored.

The software "AV-Antivir" is not recommended as when using this software, it considered parts of the Grapholas software to be a virus and deleted them.

5 First Start-Up of the Software

LEN and TIF files are prepared for exposure on a CDI using the *"Merger"*. It positions the images on the printing plate and can also rotate, mirror, crop, and invert the images as required.

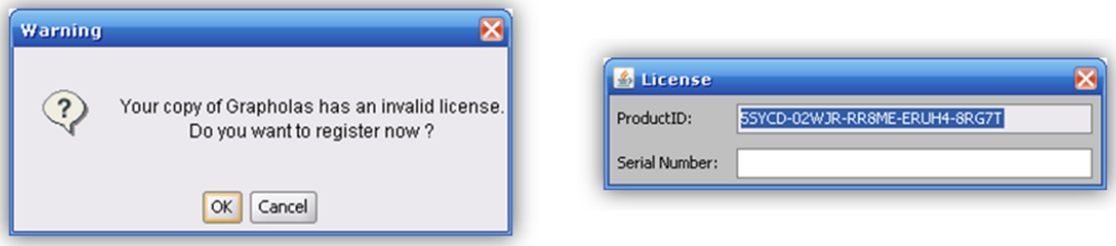
The *"Exposer"* controls the CDI with the jobs prepared by the *"Merger"*.

The *"Viewer"* is used to display and measure the LEN/TIF files. The angle and the rasterization can also be measured.

All important settings are copied over during an update. If the software is being installed for the first time, the network settings must be set.

5.1 Entering the License Key

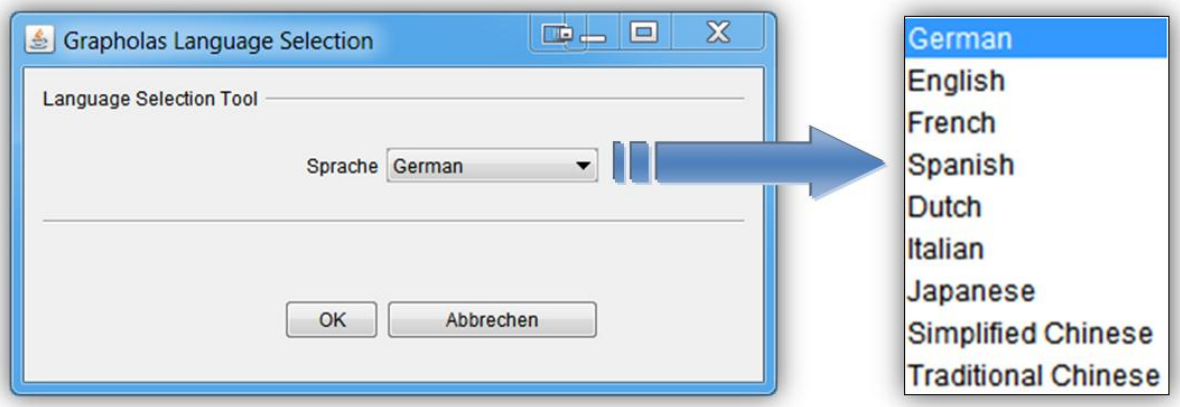
During initial installation or when updating from an older version, the license key must be entered to start the *"Merger"*:



The ESKO-Service provides a serial number for this *"ProductID"* which needs to be entered in the *"Serial Number"* field and confirmed by ENTER. The license can be subsequently changed with the *"New License"* program in the Windows Start Menu under "Esko - Digital Flexo Suite - System".

5.2 Setting the Language

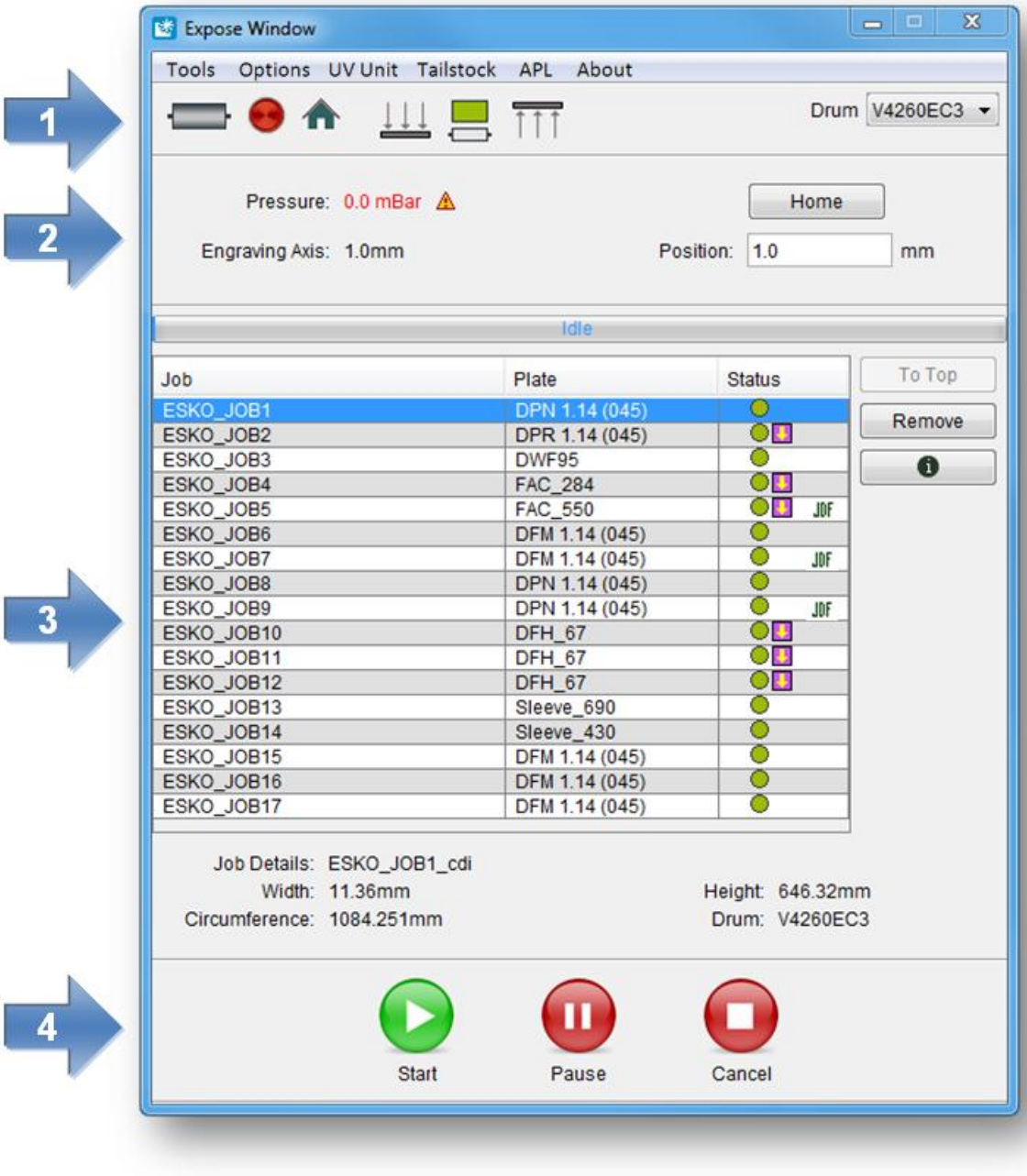
The language can be changed in the Windows start menu under "ESKO – Digital Flexo Suite - System – UI Language":



6 Exposer

The "Exposer" starts the jobs sent from the "Merger". In addition, a focus search or, for sleeves, a zero point search can be performed here.

The Exposer is divided into four areas:



Area 1: status displays and controls

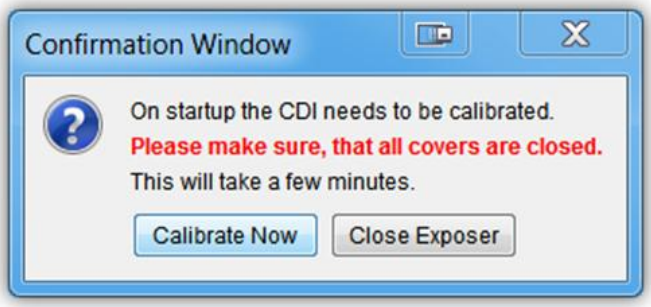
Area 2: vacuum display and position control

Area 3: job list and status display

Area 4: machine control

6.1 Calibrating the Axes

When the machine is restarted, the axes must be calibrated. The electronic system is already initialised when you start the computer.


Confirmation Window
On startup the CDI needs to be calibrated.
Please make sure, that all covers are closed.
This will take a few minutes.
Calibrate Now
Close Exposer

Before the axes are calibrated with "Calibrate Now", the cover should be closed.

6.2 Status Displays and Controls

The CDI status is displayed with icons. Depending on the version, the status of the UV exposure and the automaton can be displayed here.

If several drums are registered, the currently used drum can be selected in the *"Drum"* field.

When using "Advance Cantilever", an automatic search for the clamping bar is carried out as soon as "Drum Sleeve" is selected.

6.3 Vacuum Display and Position Control

"Engraving Axis" displays the current position of the laser. The desired start position for the imaging process is entered in the *"Position"* field and run by pressing [ENTER]. *"Home"* moves the laser back to 1 mm.

"Pressure" displays the vacuum. For full plates, a vacuum of over 900 mbar is required. The engraving process cannot be started unless the required value has been reached. For partial plates, the vacuum is not analysed since the speed was reduced to a safe value.

6.4 Job List

The *"Job"* name, the *"Plate"* type and the job *"Status"* are displayed for each job:

Completed job.

Imaging has started.

Imaging has stopped.

The job contains parameters for UV front exposure.

The job contains parameters for UV back exposure.

Data is loaded.

Error when transferring data.

Job status is shown in the AE Pilot.

Repetition after JDF exposure is not possible.

For the selected job, the *"Width", "Height,"*, *"Circumference"* and *"Drum"* information is shown below the job list.

"To top" can be used to move the job selected to the top position for imaging. *"Remove"* deletes the selected job.

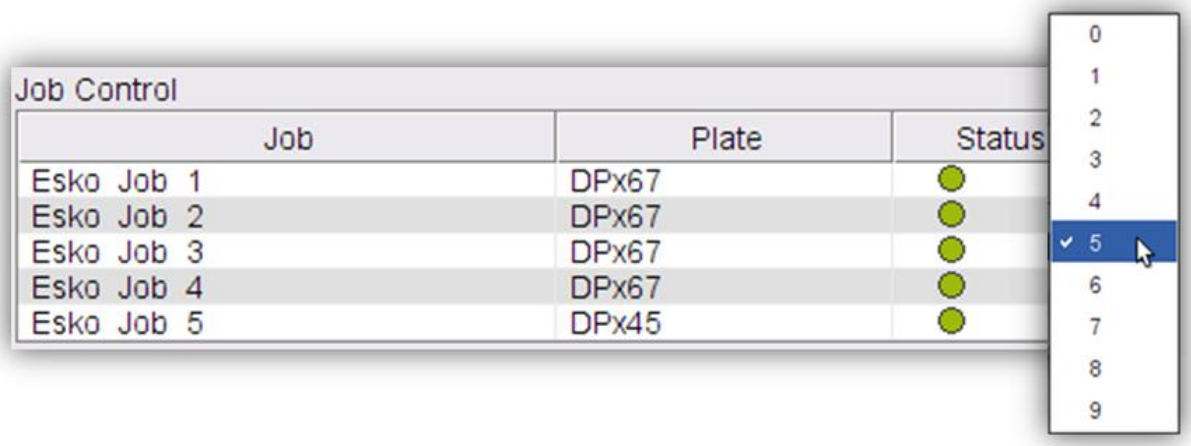
A click of the right mouse button on the job shows additional information.

Right-clicking on *"Status"* changes the position of the job, even during operation.

6.5 Machine Controls

- **Start** Start the selected job.
- **Pause** Stop the current imaging process.
- **Cancel** Cancel the current imaging process.

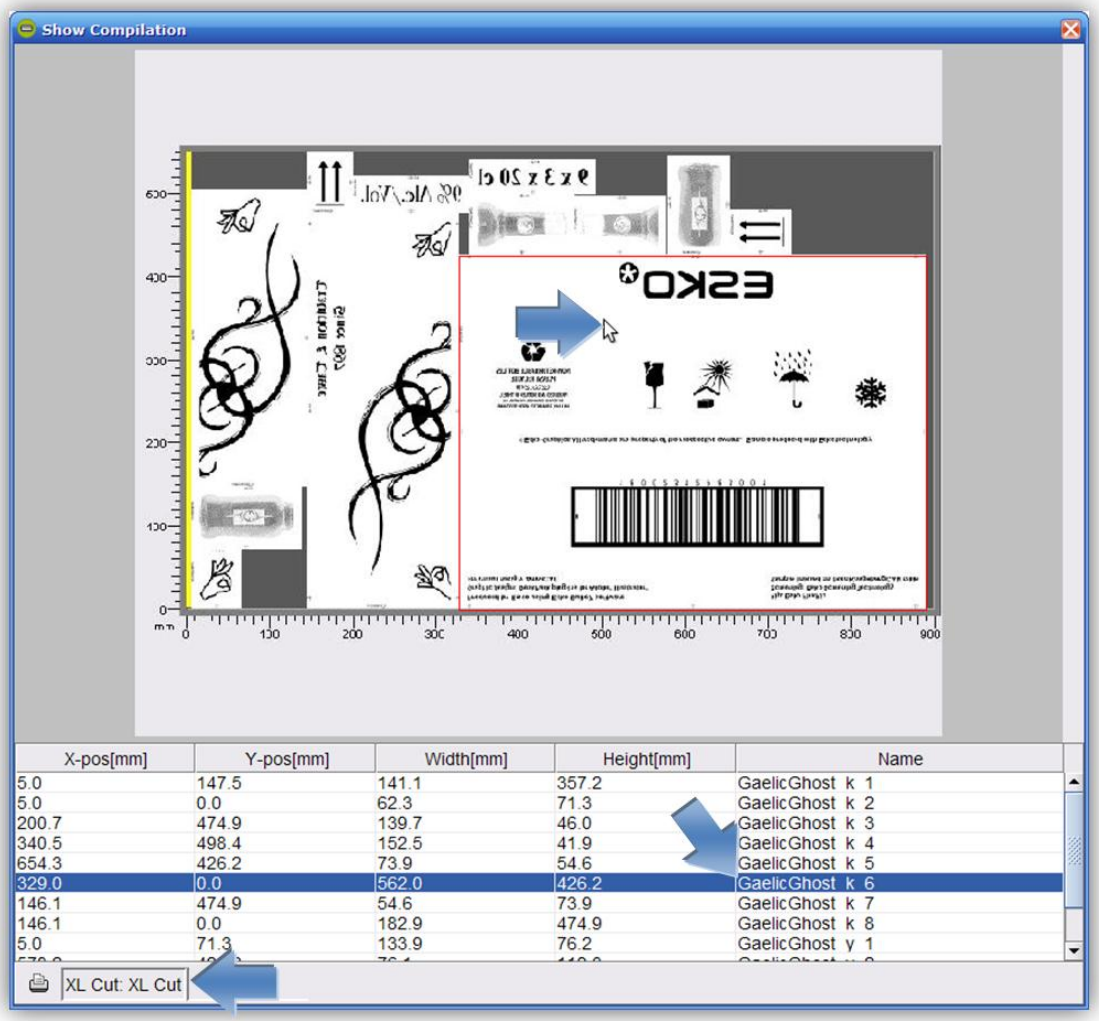
6.6 Changing the Priority



By right-clicking into the status column, you can change the position of a job during operation.

6.7 Job Information

opens a new window with the job overview.


Show Compilation
X-pos[mm] Y-pos[mm] Width[mm] Height[mm] Name
5.0 147.5 141.1 357.2 GaelicGhost k 1
5.0 0.0 62.3 71.3 GaelicGhost k 2
200.7 474.9 139.7 46.0 GaelicGhost k 3
340.5 498.4 152.5 41.9 GaelicGhost k 4
654.3 426.2 73.9 54.6 GaelicGhost k 5
329.0 0.0 562.0 426.2 GaelicGhost k 6
146.1 474.9 54.6 73.9 GaelicGhost k 7
146.1 0.0 182.9 474.9 GaelicGhost k 8
5.0 71.3 133.9 76.2 GaelicGhost y 1
XL Cut: XL Cut

When the mouse is above an image in the upper overview, the respective list entry is highlighted.

The list contains the positions, dimensions and names of the job images.

In the lower status bar, the XL CUT name and the template name are displayed. Furthermore, the overview can be printed by clicking on the printer icon.

This information is only available if the job on the CDI was sent or the PlatePrep corresponds at least with the "Version 10 Patch 2".

6.8 Starting a Job

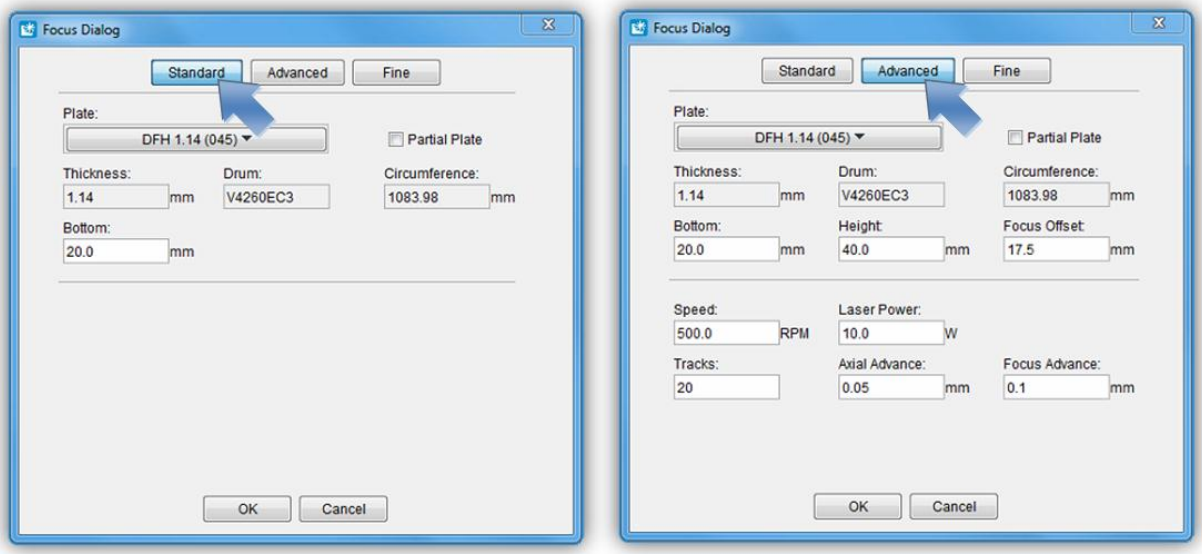
The desired job is selected from the list and run with the *"Start"* button. The job's remaining time is displayed shortly after the imaging process has started.

"Pause" stops the engraving. *"Start"* can be used to resume it, but may cause a seam in the imaging. *"Cancel"* cancels the job.

When the exposure is completed, a dialog window is displayed where the job can be deleted or put back into the queue.

6.9 Focus Search

The focus search is used to set the distance of the laser to the plate in place. The focus setting is very important for achieving the optimum imaging quality:



The plate in place has to be selected under *"Plate"*. The start of the focus search in circumference direction is set using *"Bottom"*.

For partial plate mode, the *"Partial Plate"* option has to be activated.

The focus search is lined up as new job in the Exposer by clicking on *"OK"* and started as normal job in the "Exposer".

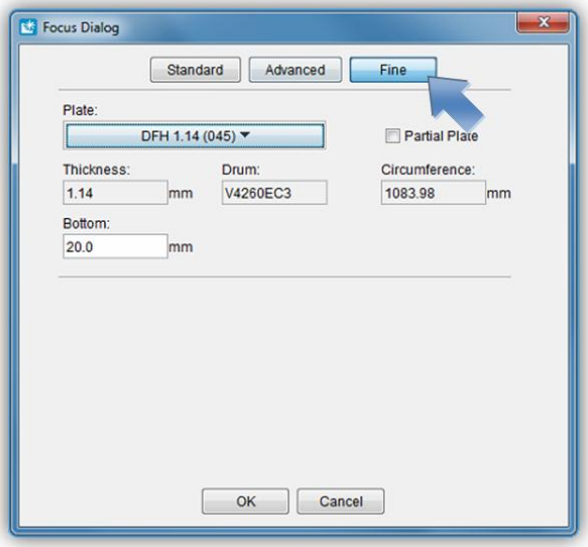
The *"Advanced"* switch can be used to display additional options.

When the focus search is ended, dialog box "FocusDialog" is displayed in which the position of the thinnest line in the focus field *"Best Track"* has to be entered. *"OK"* changes the focus setting in line with the input.

6.10 Fine Focus Search

In the fine focus search, a grid is imaged with different focus settings.

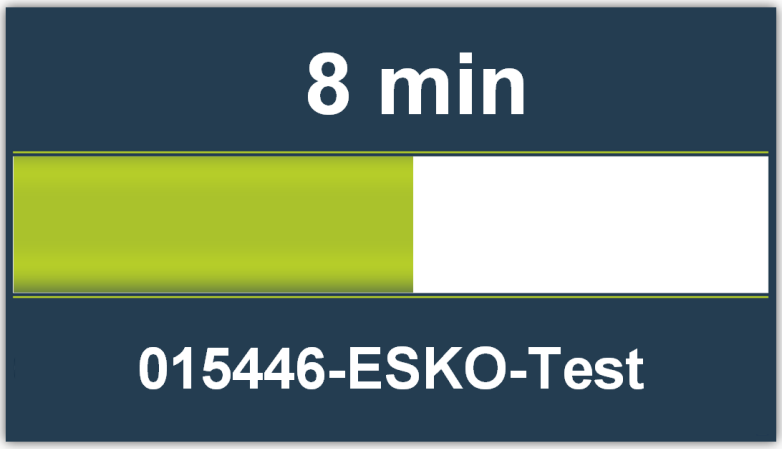
This option is only available with the "U-Fold" optics!



After imaging the fine focus search, the density of the fields is measured on a light table. The field with the lowest density has the best focus. The number above the grid field is entered in the dialog box.

6.11 Remaining Time and Progress Bar

After the start of imaging, the remaining time and the progress are displayed in full screen mode. One keystroke and the display is hidden again:

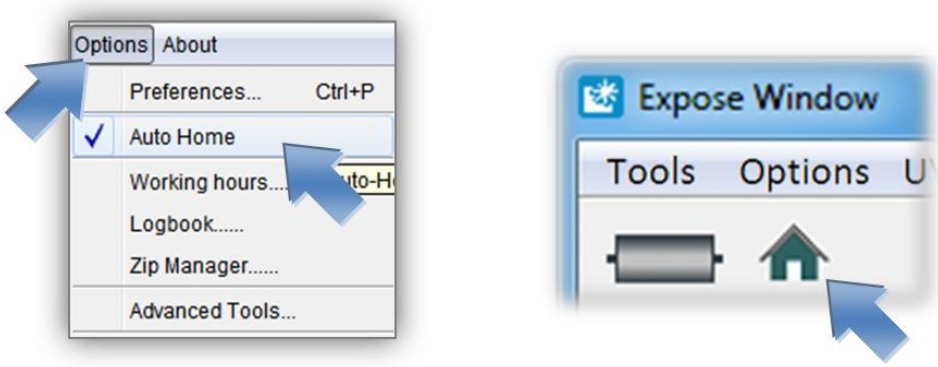


The time after which this display is started can be changed in the basic settings of the exposer.

If "0" is entered, this display is deactivated.

6.12 Using the "Auto Home" Function

Once the "Auto Home" function is activated, the advance axis for the imaging start is automatically moved to the predefined position after completion of a job.



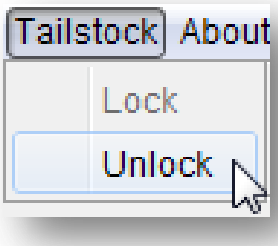
The function is activated with "Options – Auto Home". A corresponding icon is displayed in the exposer.

The position for "Auto Home" and "Home" can be changed in the basic settings of the exposer.

6.13 Control of the Tailstock – CDI Cantilever

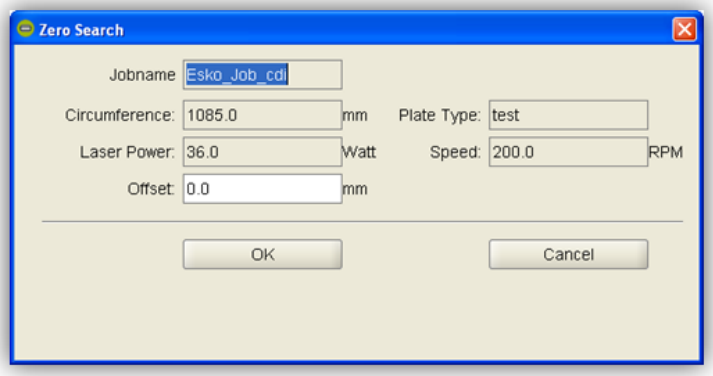
For the Cantilever, the tailstock can only be moved when the cover is closed. There must not be any objects in the tailstock's area of movement.

In the "Tailstock" menu, *"Lock"* can be used to close the tailstock and *"Unlock"* can be used to open the tailstock.



6.14 Zero Point Search for "Sleeves"

To determine the zero point on a sleeve, the job to be exposed is lined up in the "Exposer" first and then the zero point search is started via "Options". The parameters are displayed in a new window; an *"Offset"* can be entered in advance:



By pressing "OK", the job "Zero_esko_special" is lined up in the "Exposer". A ruler will be engraved on the sleeve. The zero point on the ruler corresponds to the zero point of the sleeve.

6.15 Full HD Flexo & Pixel+ Parameters

For each plate type, the Full HD Flexo or Pixel+ parameters must be determined. Only the exposure parameters for the mask opening can be set in this step. **The UV parameters must be additionally determined.**

6.15.1 Determining the Parameters - "Steptest"

The ***"Steptest"*** uses the first job in the exposer to automatically develop a test series with different parameters.

To do so, the top job must have been created using the Full HD UV or Pixel+ option and must still fit on the plate after the broadening.

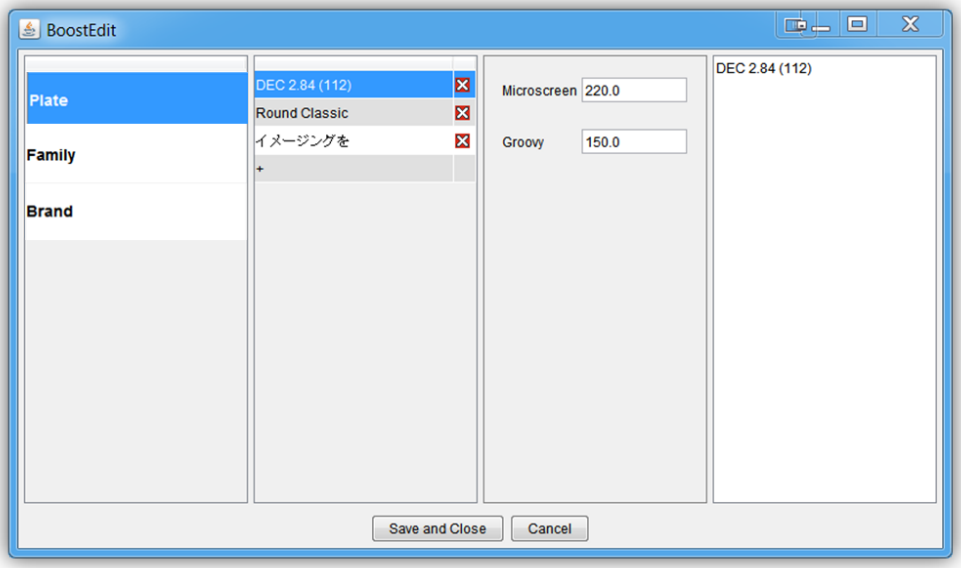
After this plate has been printed, these parameters can be changed with the "Pixel-Boost Editor".

The parameters for the StepTest can be changed in the basic settings.

6.15.2 "Pixel-Boost Editor" - Changing the Parameters

The ***"Pixel-Boost Editor"*** can be used to change the boost parameters of the microcells and groovies during imaging.

The editor can be found in the program menu under "ESKO – Grapholas - System – Pixel Boost Editor".



The parameters can be changed for the plate manufacturer "Brand" (e.g. DuPont), for the plate family "Family" (e.g. DFM) or for a used plate entry "Plate".

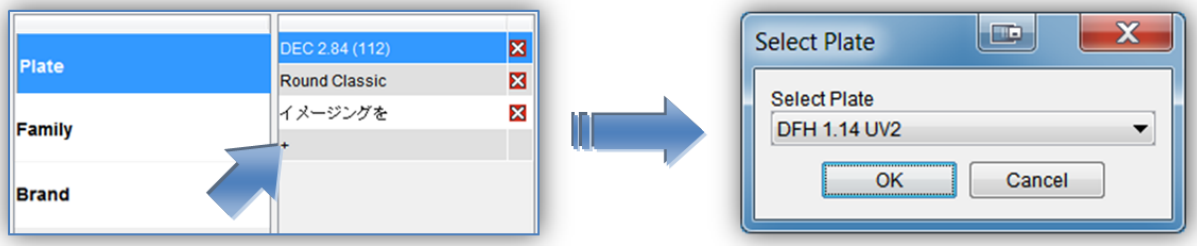
The respective selection is highlighted in blue. The values can be set for "Microscreen" and for "Groovy".

In the right column, the plate entries affected by the change are displayed.

"Save and Close" saves the values and the closes the editor.

6.15.3 “Pixel-Boost Editor” – Create new entries

With a mouse click on the “+” symbol below the existing entries a new entry can be made in the selected category:



Only activ Full HD Flexo or Pixel+ plates will be displayed.

6.15.4 “Pixel-Boost Editor” – Delete entries

Ein Eintrag kann mit einem Mausklick auf das rote „X“ hinter dem Eintrag gelöscht werden.

6.16 UV Exposure "UV Inline" (Option)

"UV Inline" exposes the upper side of the plates. This function can be activated or deactivated via *"UV Unit"*. When the CDI is restarted, the UV exposure is automatically activated unless the external cooler is switched off.

The service technician adapts the UV parameters for the desired plate types. If no UV parameters are adapted for some plates, they will be started without UV exposure. If the UV unit is deactivated, a warning is displayed when starting the exposure if UV parameters are available for this plate type.

The status of the UV unit is displayed with the following icons:

UV unit activated

UV exposure activated

6.17 Control of the Automaton

6.17.1 UV Back Exposure

The UV back exposure is available as an option for the automaton. This function can be activated or deactivated via *"UV Unit"*. When the CDI is restarted, the UV back exposure is automatically activated.

The service technician adapts the UV parameters for the desired plate types. If no UV parameters are adapted for some plates, they will be started without UV back exposure.

The status of the UV back exposure unit is displayed with the following icons:

UV back exposure unit activated

UV back exposure activated

6.18 Using the "TimeStamp" Function

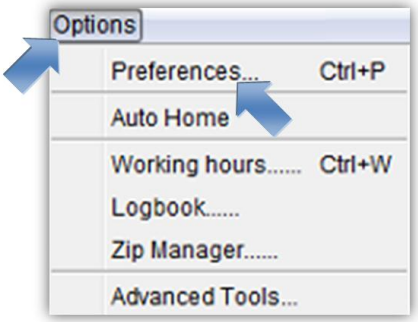
When the "TimeStamp" function is activated, the current date and time are added to each image in the appropriate place. A text can also be entered.

Existing image content is overwritten.

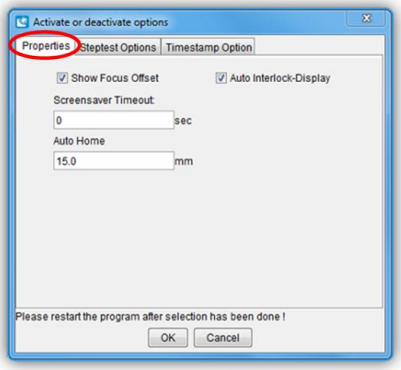
This function is activated in the basic settings of the exposer.

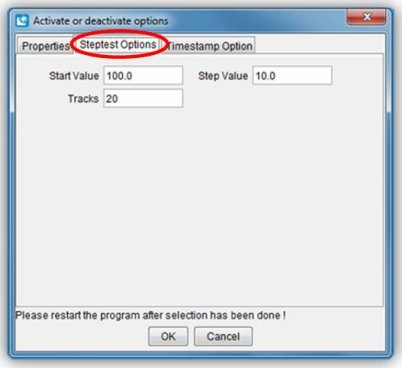
6.19 Exposer Basic Settings

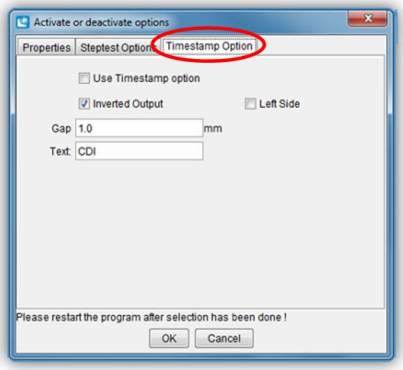
The basic settings of the exposer can be changed under "Options – Preferences":



The parameters for the full screen progress bar, for the "StepTest" and for the "TimeStamp" option can be changed in three categories. In addition, the position for the "Auto Home" function is entered here.


Activate or deactivate options
Properties
Steptest Options
Timestamp Option
Show Focus Offset
Auto Interlock-Display
Screensaver Timeout:
0
sec
Auto Home
15.0
mm
Please restart the program after selection has been done !
OK
Cancel


Activate or deactivate options
Properties
Steptest Options
Timestamp Option
Start Value
100.0
Step Value
10.0
Tracks
20
Please restart the program after selection has been done !
OK
Cancel

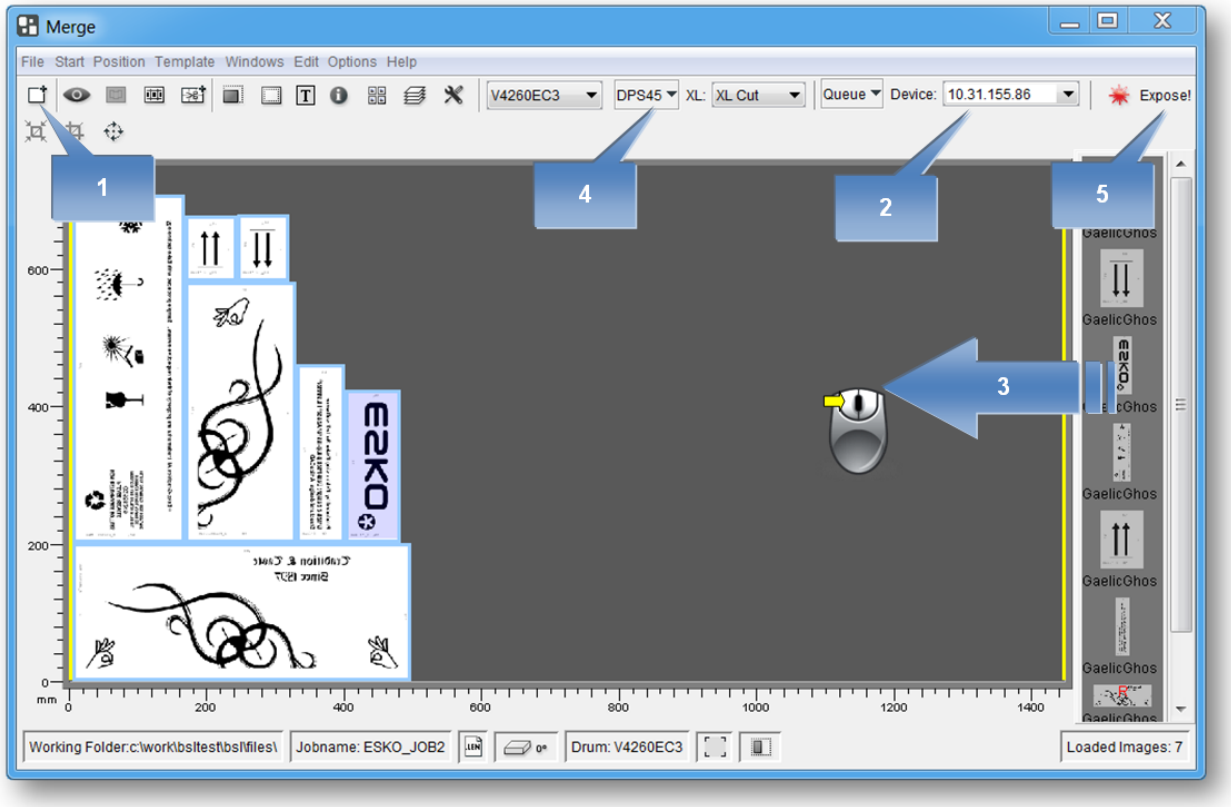

Activate or deactivate options
Properties
Steptest Options
Timestamp Option
Use Timestamp option
Inverted Output
Left Side
Gap
1.0
mm
Text:
CDI
Please restart the program after selection has been done !
OK
Cancel

7 Merger

The *"Merger"* is used to load the image data from the local hard drive or from the network and to send it to the preselected CDI.

In addition, simple tools such as "mirror", "crop" and "rotate" are available.

7.1 Quick Start



1 Start the "Merger" and load the required images. They are displayed in the image gallery (on the right).

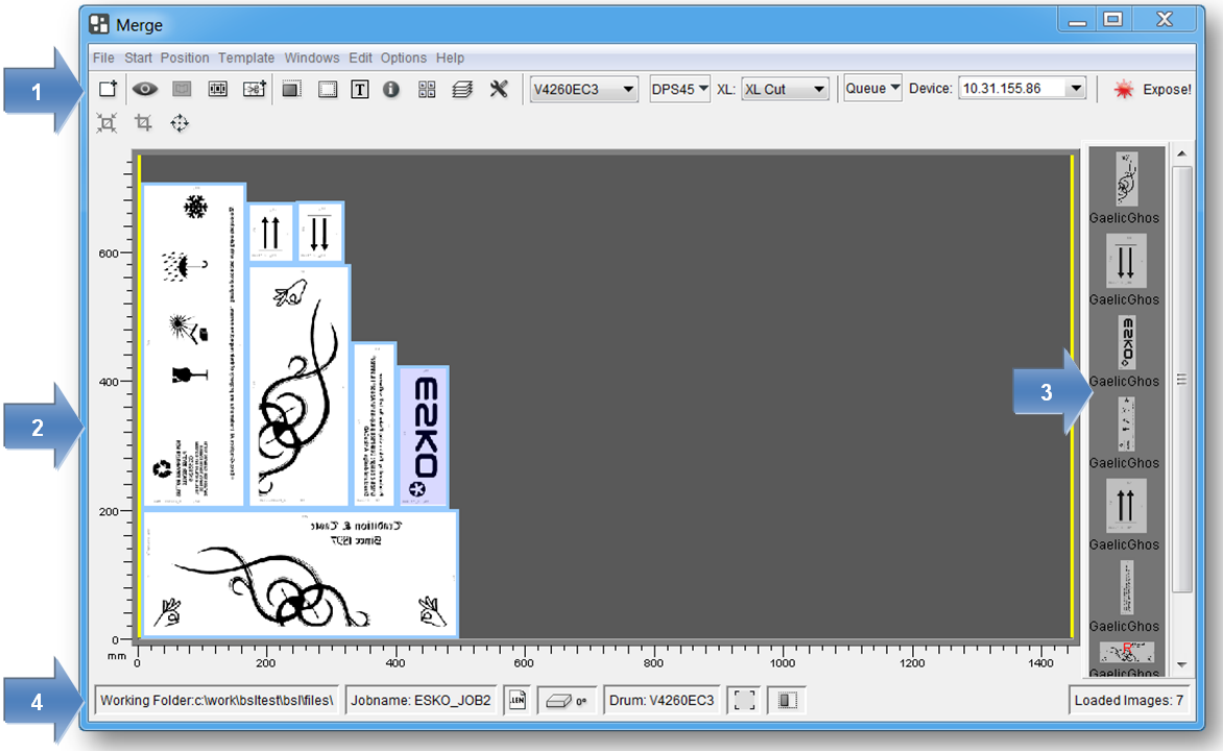
3 Position the images on the working surface. Right-click on the images or the working surface to display additional information.

4 Select the required plate. Right-click on the plate to display additional information.

5 Send the job.

7.2 The User Interface

The Merger can be divided into four areas:



Area 1: menu bar / toolbar with icons for the most important options

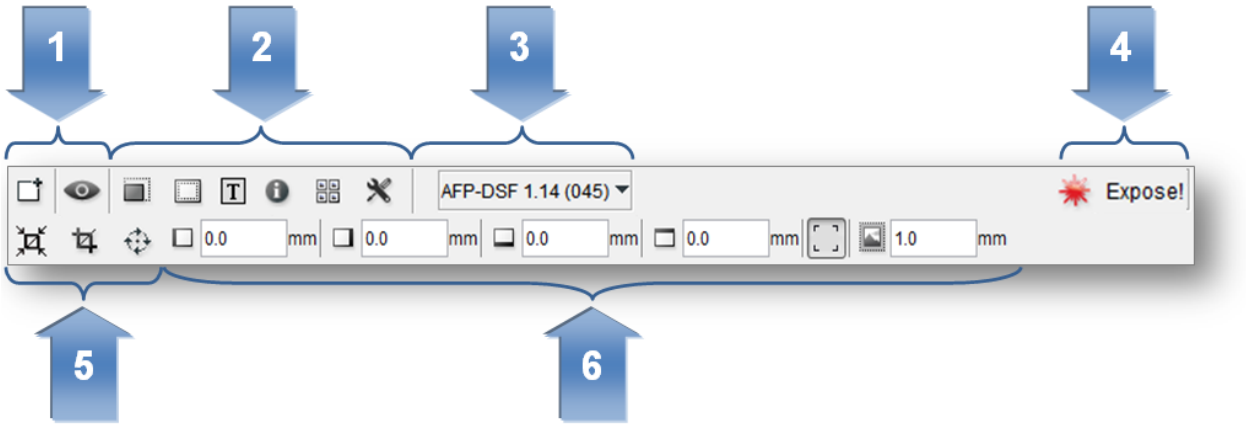
Area 2: working surface on which the images are positioned

Area 3: display of loaded image data

Area 4: status bar - display of the most important settings

7.3 Toolbar

All important functions are listed in this area. The toolbar is subdivided into six areas:



1 Opens a dialog box to load image files and opens the *"Bitmap Viewer"*.

2 Activates additional functions in area 6 to adapt the output.

3 Allows to set the data output, for example, the drum, the plate and the CDI.

4 Opens a dialog box to send the job.

5 Allows to modify the image data, for example, rotating and cutting.

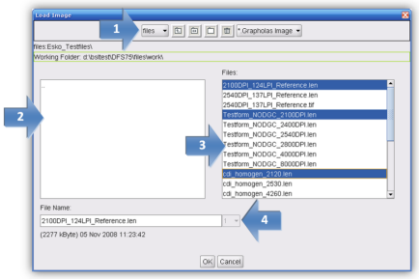
6 Area for the various functions selected in area 2.

If some required functions are not displayed, they can be activated in the Merger configuration settings.

7.3.1 Loading Images

Ctrl + E

calls up a file dialog box in which the LEN or TIF files can be selected.



1 Selection of network shares.

2 Display of directories.

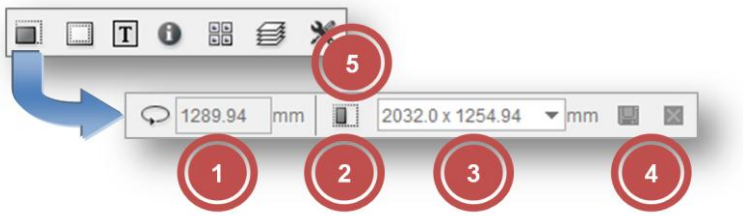
3 Display of files. By pressing the *"Control"* or the CAPS button together with the left mouse button, several files can be marked simultaneously; they can then be loaded by pressing *"OK"*. Single files can directly be loaded by double-clicking them.

4 Multiple loading of the files.

7.3.2 Displaying Image Data

Opens the *"Bitmap Viewer".*

7.3.3 Plate Size and Partial Plate

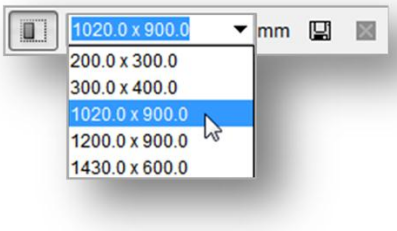


1 Display of the drum circumference – This value can be changed for sleeves.

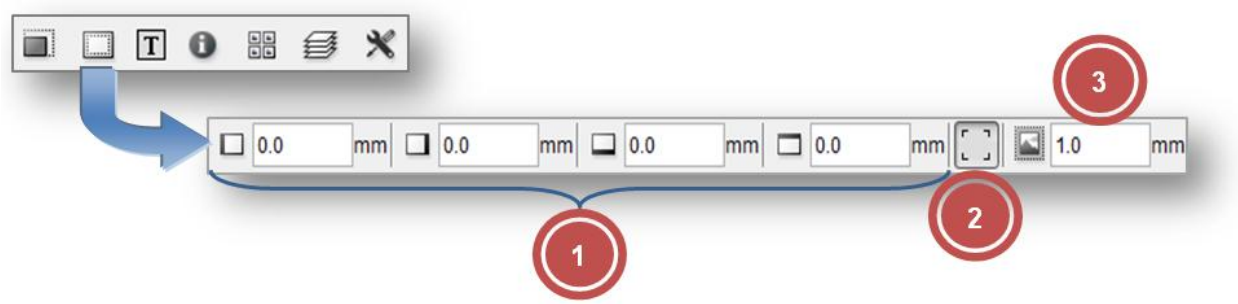
2 Switchover to partial plate – In this mode, the vacuum on the CDI is not analysed and is reduced to a lower, safer speed.

3 Allows to set the plate width and plate height in partial plate mode. The data is entered in the format 'width x height' (e.g. 768 x 500).

4 Save the newly entered entry or delete an entry from the existing list:



7.3.4 Frames and Cutting Lines

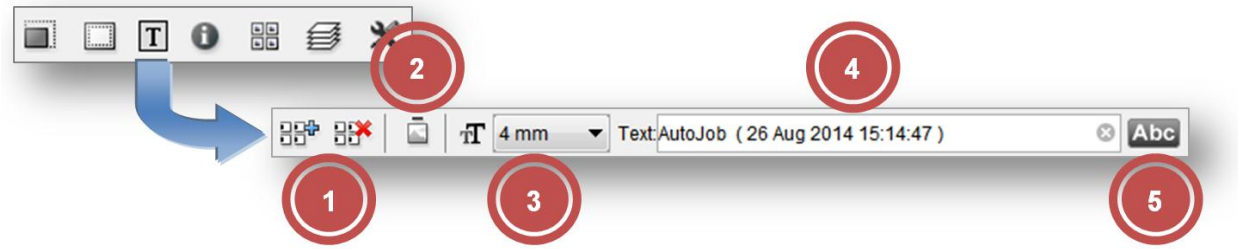


1 Allows to enter a frame area which is not available for the imaging process. The area is marked red.

2 If activated, cut marks are added in the corners of each image.

3 Distance between cut marks and image.

7.3.5 Adding Text



1 Adds or removes text to all positioned images. A frame is automatically added to all images.

2 Allows to switch the position (top or left).

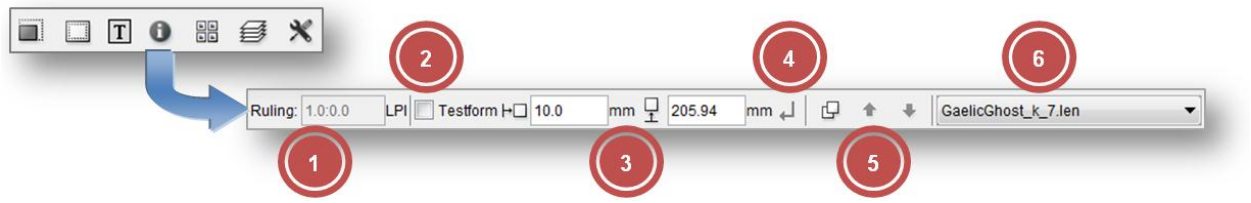
3 Selection of the text size.

4 Input field for the text. The text should not be longer than the image width or height. The position and width of the text is marked in yellow on the working surface. A frame is automatically added to all images.

The text can be deleted by clicking on the "X" at the end of the input field.

5 Allows to add an image name together with a date and time stamp.

7.3.6 Information on Grids and Image Position



1 Allows to enter the raster count and the angle if they have not yet been included in the image. Images without this information are marked in red on the working surface.

2 Allows to mark an image as a test wedge. For this image, the output optimisation function is deactivated to increase productivity. If highlighted in grey, these two fields are irrelevant for the selected CDI.

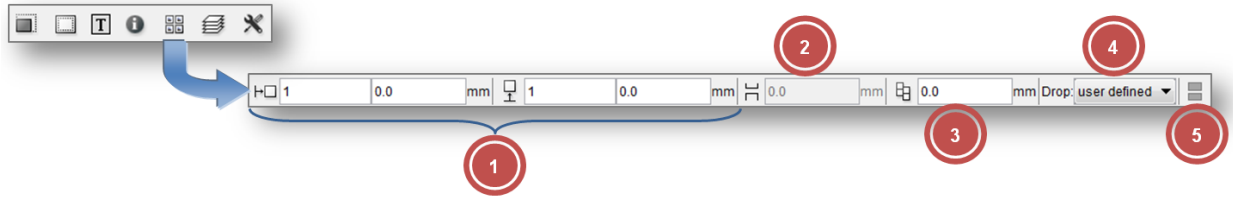
3 Allows to display and change the current image position.

4 Confirmation of the changed image position. The image is not positioned until the changed image position is confirmed.

5 Allows to activate the overlaying option. The images can be positioned on top of each other. Using the arrows, the selected image can be positioned above or below another image.

6 Allows to display and change the image to make further changes.

7.3.7 "Step & Repeat" and Seamless Option for Sleeves



1 Allows to enter the number of repetitions in horizontal and vertical direction. It is possible to set a gap between the images.

2 Displacement of the image above the zero point of the sleeve (5 activated).

3 Offset of the images to each other when horizontal repetition is selected (5 activated).

4 Predefined offset of the images to each other (5 activated).

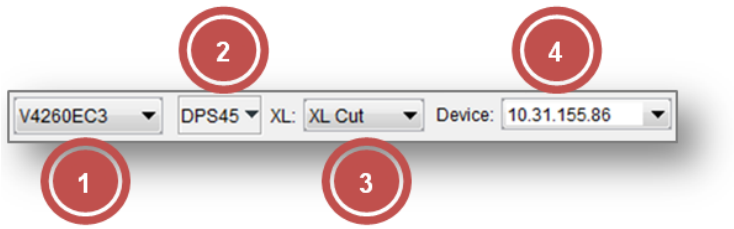
5 Activates the seamless option. If the image is smaller than the circumference, a gap will be automatically added and repeated in vertical direction if possible.

7.3.8 Mirroring and Inverting

If this icon is not displayed, it can be displayed by selecting "Image Manipulation" under *"Options - Configuration"*.

Allows to mirror (horizontally or vertically) and invert the selected image. "ymir", "xmir" or "inv" is added to the new files.

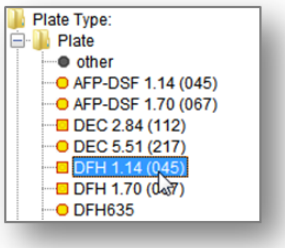
7.3.9 Output Options

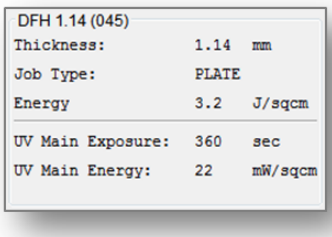


1 Selection of the drum on the CDI. This option is only shown if more than one drum or the drum and the sleeve have been set up on the CDI.

2 Selection of the plate. To ensure an optimum imaging result, the right plate needs to be selected. Additional information such as "UV Inline" and "Full HD Flexo" is stored on the plate.

Normal plates are marked with a circle and Inline UV plates are marked with a square.





Using the right mouse button to click the plate entry displays information on the plate properties.

Only the plate types which fit the selected drum are displayed.

For more information, refer to chapter *"Managing the Plate List"*.

3 Selection of the required Kongsberg settings. If activated, a yellow bar is visible on the left or on the bottom in the "Merger".

The cutting file for the Kongsberg is stored in the directory which was selected for this setting.

For more information, refer to chapter *"Kongsberg Output (XL CUT)"*.

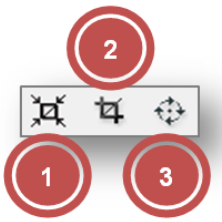
4 Selection of the output device. CDIs and TIF output devices are listed separately.

7.3.10 Generating a Job

Ctrl + E

opens a dialog window in which the job name can be entered. Pressing *"OK"* sends the job.

7.3.11 Cropping and Rotating Images



1 Automatic cropping of the selected images. Unused frame areas are removed.

Right-click the icon to undo the changes.

The distance to the "Bleed" pixels can be set in the "Merger" properties. If the image contains "Staggered Cut" information, the image is cut on the cutting line.

2 Opens a new window in which the image can be cut. For more information, refer to chapter *"Manual Cropping"*.

3 Rotates the selected images by 90°. The rotated files are generated when sending the data to the output device. Depending on the resolution, this may take some time.

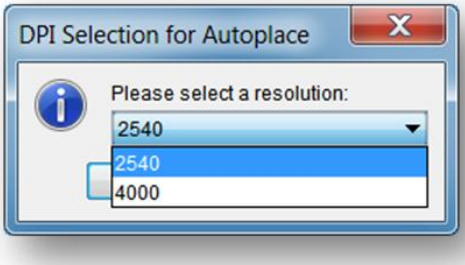
7.3.12 Automatic Positioning of the Images

The images loaded in the Merger can be automatically positioned.

Use the key combination ***Ctrl + a*** to reposition all images automatically. Images which were already positioned on the working surface are removed.

Use the key combination ***Ctrl + h*** to position all not positioned images automatically. Already positioned images are **not** removed.

When more than one image was marked (***Ctrl + left mouse button***), only these images are used for automated positioning.



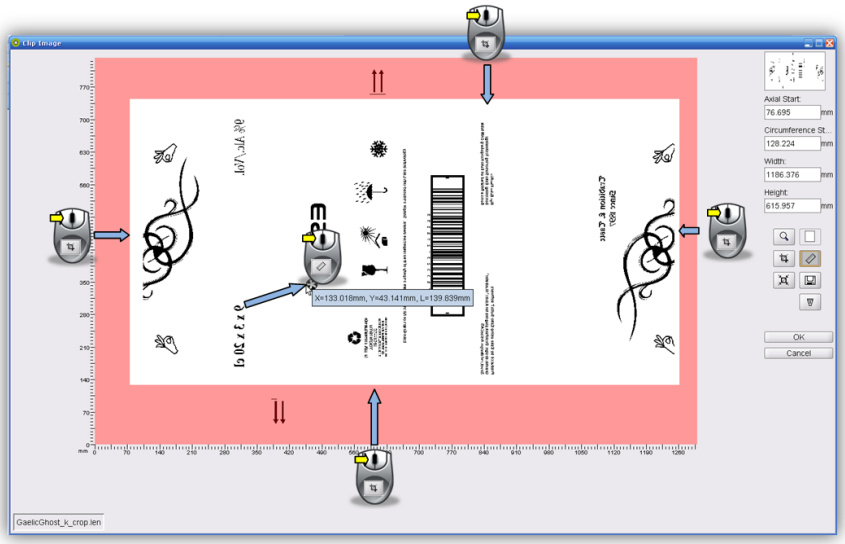
Images with different resolutions cannot be sent on one plate to the CDI. When multiple resolutions are available for the automatic positioning, a selection is displayed.

Only the images with the selected resolution are then positioned.

You can define in the basic settings of the Merger how to position the images. If the images are to be subsequently cut by hand, then the cut-optimised positioning method is a good choice.

7.3.13 Manual Cropping

opens a new window in which the image can be cropped:



Starting from the frame area, a lasso can be pulled open by pressing and holding down the left mouse button and pulling the mouse across the working surface; or the exact lasso size can be entered in the four input fields on the right-hand side (1).

The distance between two positions in the image can be measured by pressing and holding the left mouse button down.

Individual sections of the image can be enlarged with a square magnifier by pressing and holding down the left mouse button and pulling the mouse across the section of interest. The magnified image section can then be positioned using the arrow keys on the keyboard.

displays the entire image.

performs the automatic cropping.

sets back all cutting edges.

saves the current image section as a new LEN file.

Manual cropping is not available for LEN files of the *"PlatePatcher"* and the *"Staggered Cut"*.

7.4 Menu Bar

Only the additional functions which are not listed in the toolbar are described. The menu bar is situated above the toolbar.

7.4.1 Unloading Images

"File - Unload Image" (Ctrl + u) removes the selected image from the "Merger". The file is not deleted from the hard drive.

7.4.2 Unloading Positioned Images

"File - Remove All Positioned Images" (Ctrl + d) removes all images from the "Merger" which are positioned on the working surface. The files are not deleted from the hard drive. This is useful when the job was sent and several images are still in the queue.

7.4.3 Selecting the Working Directory

"File - Select Working Folder" (Ctrl + w) changes the working directory in which all images are copied or moved during the loading process. This option is not available if images are loaded.

7.4.4 Saving the Image Arrangement

"File - Save Plate" (Ctrl + s) saves the compiled images and the exposure parameters as plate. When the compiled images are sent to the CDI, the plate is automatically saved under the entered name.

"File - Save Plate as" saves the compilation under another name.

7.4.5 Loading the Image Arrangement

"File - Load Plate" (Ctrl + L) loads a previously saved or sent compilation with all parameters. All currently loaded images are removed.

7.4.6 Deleting the Image Arrangement

"File - New Plate" (Ctrl + n) removes all images from the "Merger" and resets the parameters.

7.4.7 Automatic Positioning of the Images

"Position - Auto Arrange Images" (Ctrl + a) automatically positions as many loaded images as possible on the working surface. Beforehand, images which were already positioned on the working surface are removed. The type of positioning can be selected in the "Merger" properties.

7.4.8 Automatically Positioning New Images

"Position - Auto Arrange New Images" (Ctrl + h) automatically adds the loaded images to the compilation on the working surface. Already positioned images are not removed.

7.4.9 Removing Images from the Working Surface

"Position - Unplace all" (Ctrl + u) removes all images from the working surface. The images are not unloaded.

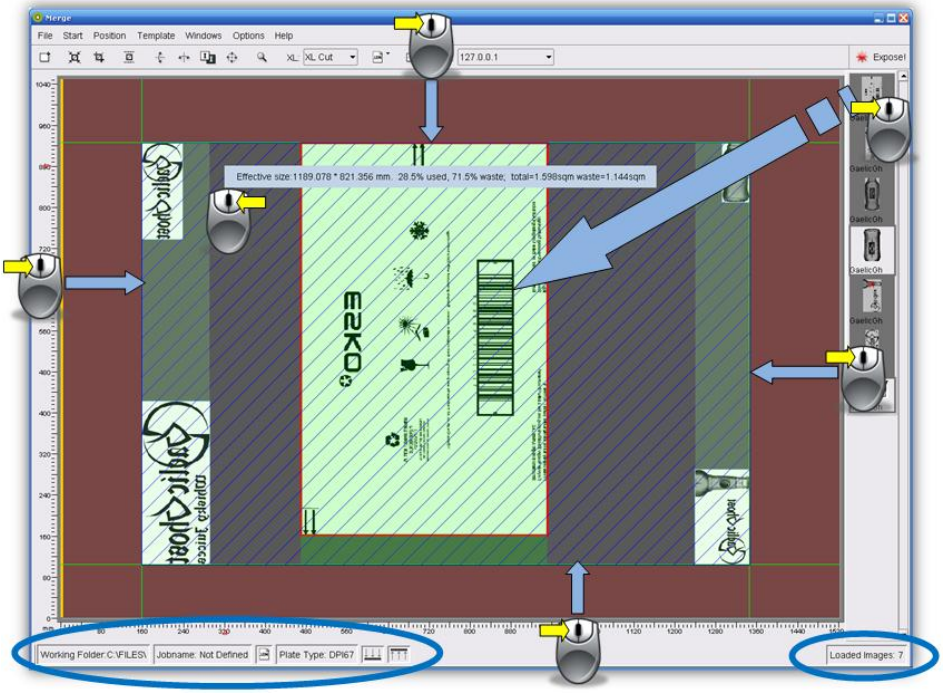
7.4.10 Displaying File Names

"Windows - Display Names" shows the file names in the images positioned on the working surface.

7.5 Working Surface and Status Bar

The working surface shows the available area on the plate. It is not necessary to enter the upper and lower borders as the entire working area is shown.

The loaded images are pulled from the right queue on the working surface by holding down the left mouse button.


File Start Position Template Windows Options Help
Effective size:1189.078 * 821.356 mm; 28.5% used, 71.5% waste; total=1.598sqm waste=1.144sqm
Working Folder:C:\FILES\
Jobname: Not Defined
Plate Type: DPI67
Loaded Images: 7

In addition, guides can be pulled from the grey frame area by holding down the left mouse button. The images cannot be positioned in the red area. The guide can be removed again by right-clicking on the grey frame area.

Right-clicking on the image file displays information on the image.

The status bar shows the current settings and the number of loaded images.

7.6 Displaying Plate Use

Using the right mouse button to click on the work surface displays information on the plate size and the use of the plate.

	Width: [mm]	Height: [mm]	Used [%]	Waste [%]	Used [sqm]	Waste [sqm]
Partial Plate	947.744	277.462	49.4	50.6	0.263	0.133
Full Plate	1000.0	800.0	16.2	83.8	0.8	0.67

The "Partial Plate" line shows the values for the marked area. The "Full Plate" line refers to the entire work area.

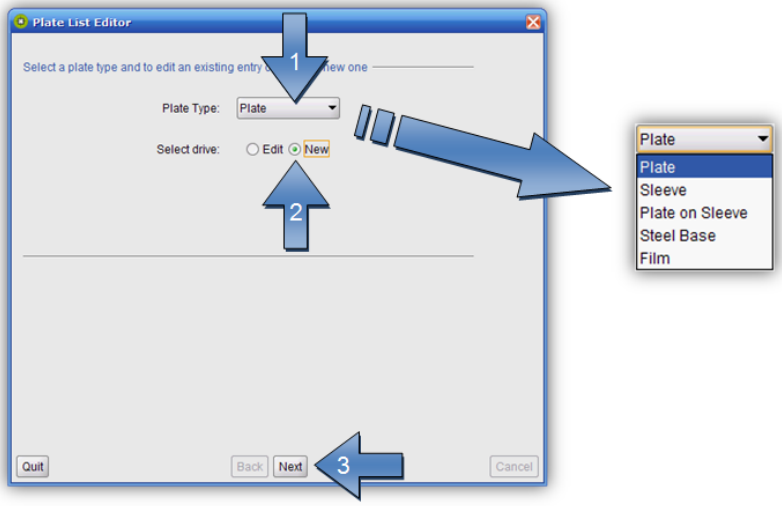
7.7 Managing the Plate List

Selecting ***"Edit – Edit Plate List"*** opens a new window where you can delete, change and create new plates.

"Cancel" aborts the process – no data is changed. By pressing ***"Quit"***, the window is closed. ***"Next"*** shows the next window.

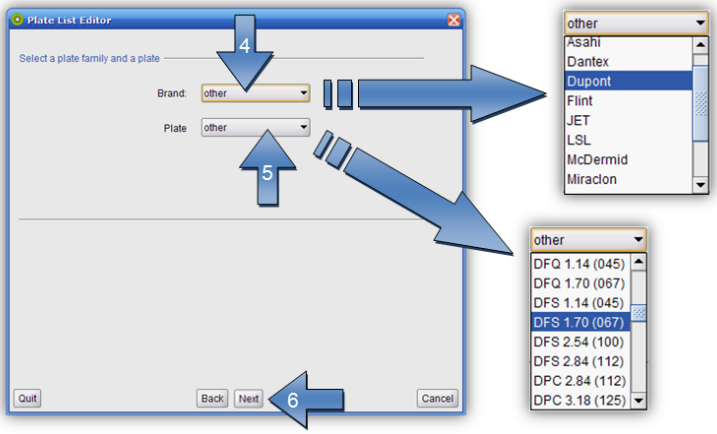
7.7.1 Creating a New Plate

First select the desired medium ***"Plate Type"*** (1), then check ***"New"*** (2) and press ***"Next"*** (3) to go to the next menu:

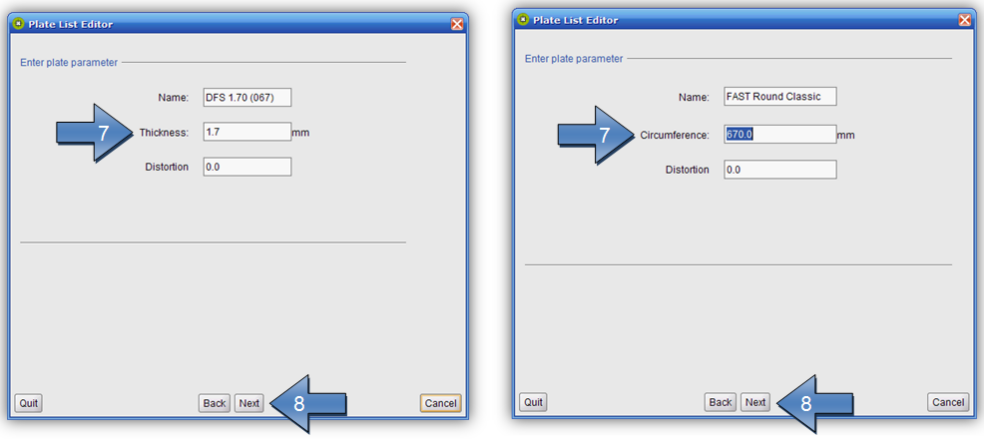


- "Plate" – Flexo Plates
- "Sleeve" – print sleeve of DuPont and Flint
- "Plate on Sleeve" – Flexo plates mounted on a print sleeve
- "Steel Base" – metal backing plate for magnetic drum
- "Film" – Film

If Grapholas 10.1 or higher is installed on the CDI, a plate database is shown. When the desired plate manufacturer ***"Brand"*** (4) or the plate type ***"Plate"*** (5) are not available, the option ***"other"*** can be selected:

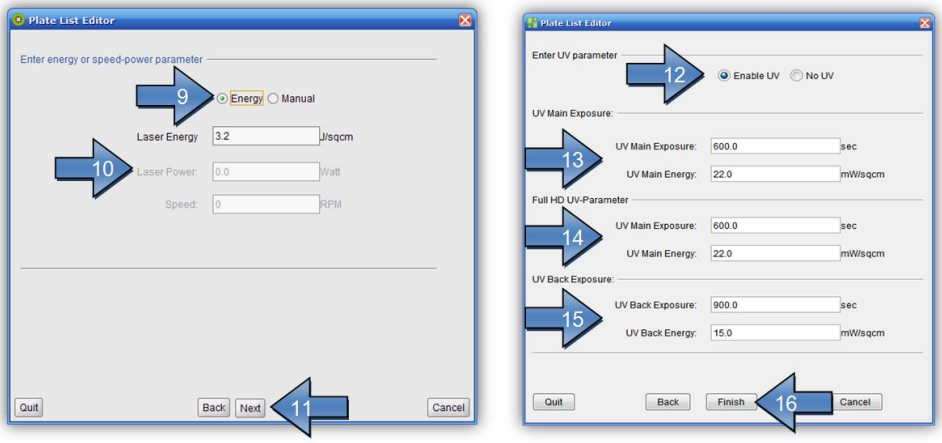


"Name" (7) determines the display name in the plate list and ***"Thickness"*** (7) the plate thickness. For sleeves, the circumference is entered in the ***"Circumference"*** (7) field:



Additionally, the output in the ***"Distortion"*** (7) field can be distorted in circumference direction. The input is made as a percentage. If you enter "5.0", the output is enlarged by 5 percent in circumference direction. Entering "-5.0" would downsize the output accordingly.

Under ***"Manual"*** (9), enter the values for ***"Speed"*** (10) and ***"Laser power"*** (10). The setting ***"Energy"*** (9) sets the laser energy ***"Laser Energy"*** (10) and speed and performance are selected automatically according to the resolution:



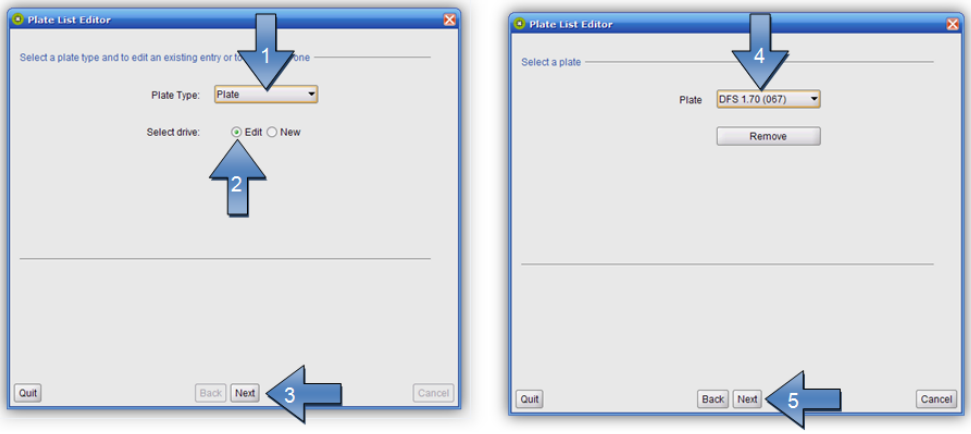
With Inline UV, enter for the front exposure the values ***"UV Main Exposure"*** (13) and ***"UV Main Energy"*** (13) and with automatons, enter for the back exposure the values ***"UV Back Exposure"*** (14) and ***"UV Back Energy"*** (14). You can deactivate the UV exposure by checking ***"No UV"*** (12).

UV2 exposure parameters are specified in section ***"Full HD UV Parameters"*** (14) when the CDI has been prepared for Full-HD Flexo.

"Finish" (16) saves the plate.

7.7.2 Changing the Plate

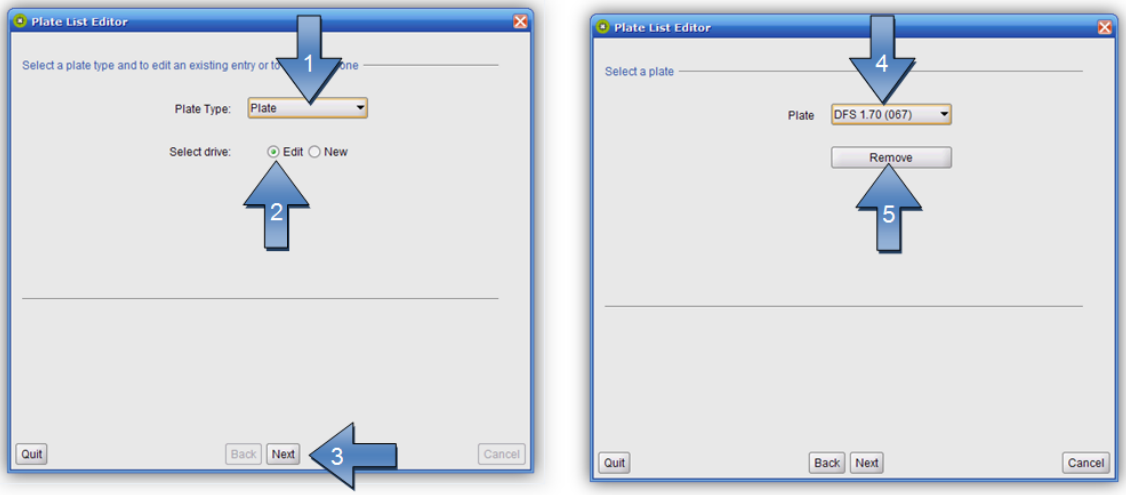
First select the desired medium ***"Plate Type"*** (1), then check ***"Edit"*** (2) and press ***"Next"*** (3) to go to the next menu:



After setting the desired ***"Plate"*** (4), you can change all parameters except for the plate name. ***"Next"*** opens the next menu.

7.7.3 Deleting the Plate

First select the desired medium ***"Plate Type"*** (1), then check ***"Edit"*** (2) and press ***"Next"*** (3) to go to the next menu:

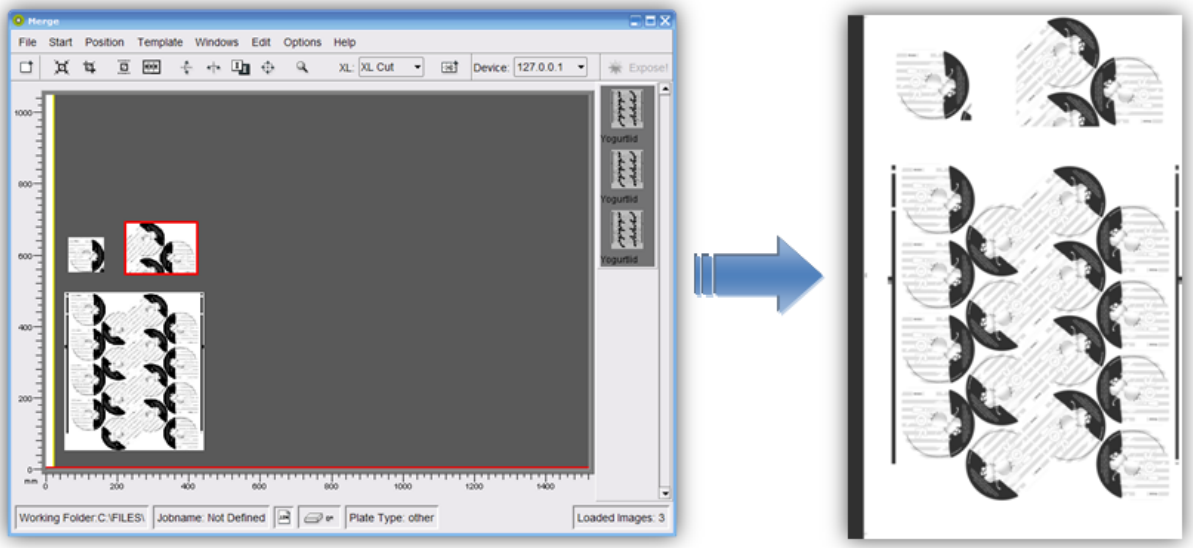


The desired plate ***"Plate"*** (4) is set and removed by pressing ***"Remove"*** (5).

7.8 Exposing Plate Borders

The *"Expose frames"* option can be activated in the basic settings of the "Merger" under *"Edit – Preferences…"*, giving the plate more stability in the washer.

The left and the right border can be set in the *"Drum Window"* and is now shown in white. When the TIF output is negative, the border is displayed in black.



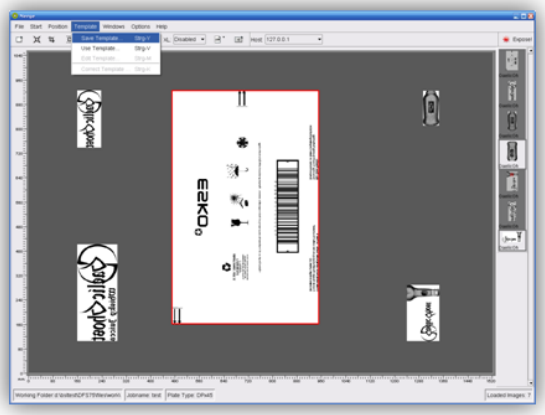
7.9 Templates

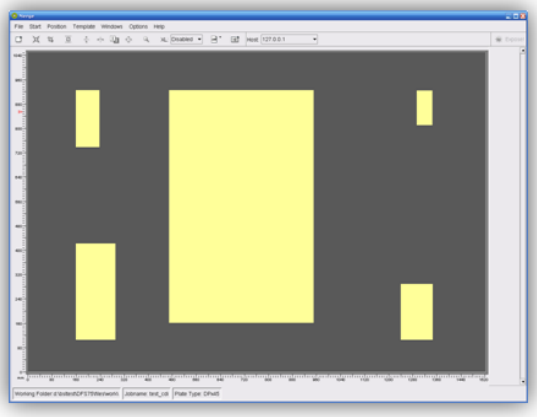
If these functions are not displayed, they can be activated in the basic settings.

The positions, image sizes, image resolution and plate parameters are stored in the template in order to position images quickly at a later time. This working mode is interesting for register pinwheels such as, for example, for Letterpress.

7.9.1 Creating a Template

To create a template, you first position the required images onto the working surface and then select the plate type. This compilation is then saved by pressing *"Template - Save Template"*.





7.9.2 Loading a Template

"Template - Use Template" loads the template. This is only possible when no other images are loaded in the "Merger".

The stored positions and sizes are shown as yellow fields. After loading the images, they can be positioned in the yellow fields.

The images must be within a certain size tolerance in order to be assigned to a field.

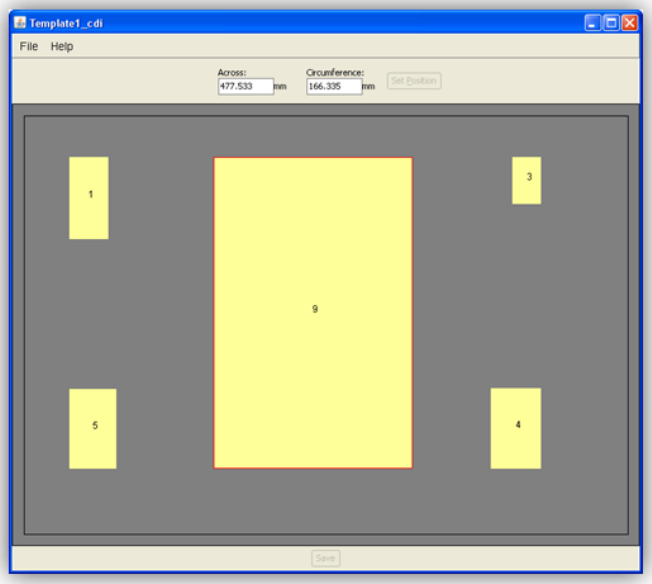
7.9.3 Modifying a Template

After loading the template and positioning all the images, the mask can be opened using *"Template - Edit Template"*. Now you can change all parameters as required and save them using *"Template - Save Template"*.

The modified template can now be loaded using *"Template - Use Template*".

7.9.4 Moving a Template

"Template - Correct Template" opens a new program in which the template can be loaded using "*File – Load Plate*".



The position of single or multiple images can be changed horizontally using *"Across"* and vertically using *"Circumference"*. The value is entered absolute or relative to the current position, ENTER is then pressed and the value is set using *"Set Position"*.

Multiple images can be marked by pulling a square lasso around the required images with the left mouse button pressed.

The template is saved by clicking the *"Save"* button.

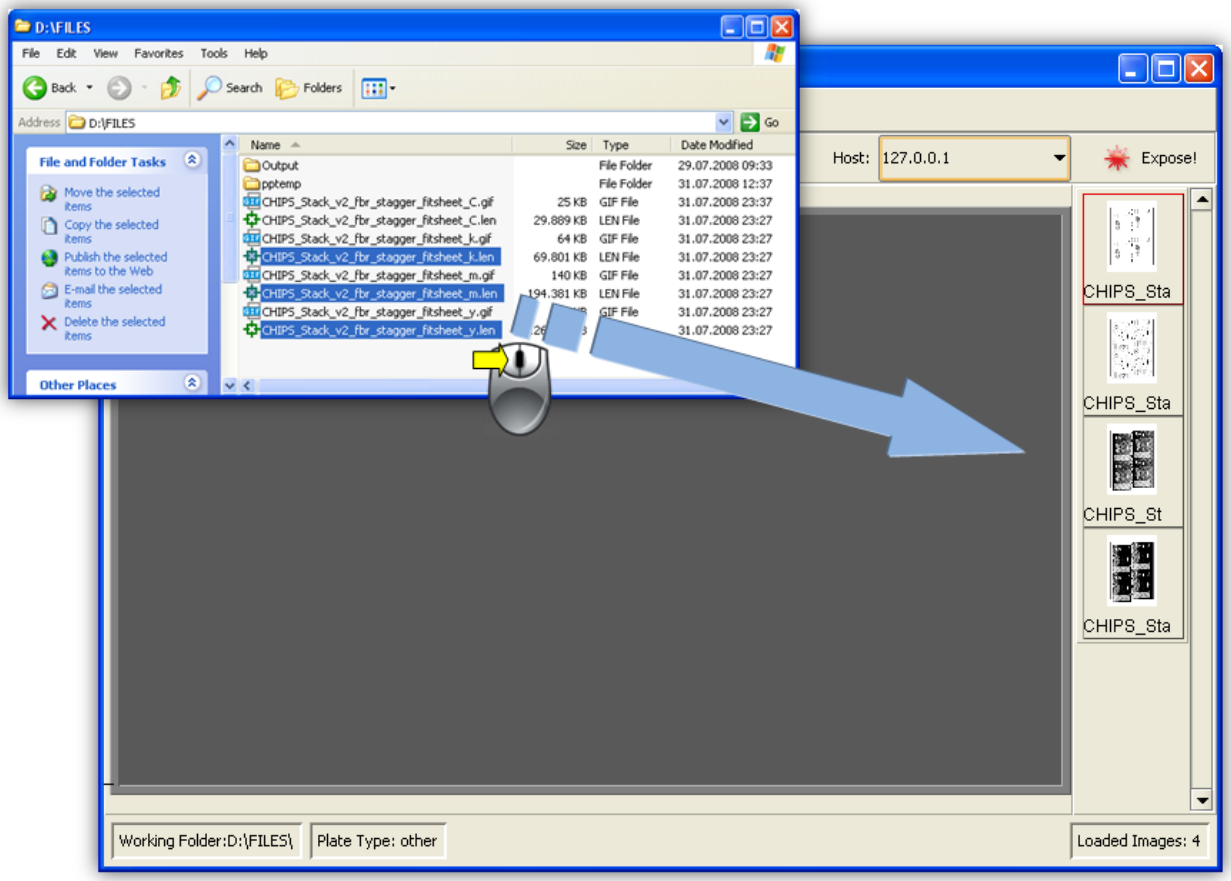
7.10 Job Information

An HTML or XML file with the respective job name is created in the *"HTM Target Folder"* output directory for each sent job.

All important information concerning the job is stored in that directory. The output directory "d:\files\output\html" is preset.

7.11 Loading Images via "*Drag & Drop*"

Image files (LEN and TIF) can directly be dragged into the right image bar of the "Merger" from the Windows Explorer. First, the data is copied into the working directory, then it is loaded. If the *"Ctrl"* key is pressed at the same time, the files are always copied.



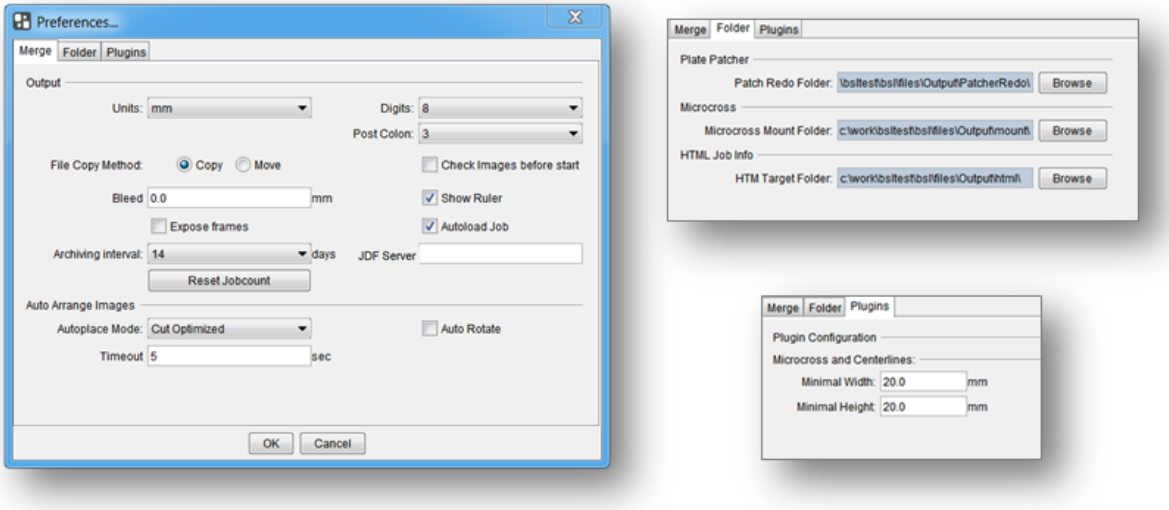
7.12 "Unique ID"

All LEN and/or TIF files from an AE12 system contain a unique code which can be read by the Merger.

As soon as the "Unique ID" option is activated under "Options – Configuration", this code is added to all images.

7.13 Basic Merger Settings

The basic settings of the Merger can be changed via the menu item *"Options – Preferences…"*:



"Units" switches between "mm" and "inch".

"Digits" and *"Post colon"* set the amount of numbers and/or decimal points.

"Check Images before start" checks the images of all outgoing jobs.

"File copy method" sets the behaviour while loading images. If *"Copy"* is selected, the files are always copied, if *"Move"* is selected, they are deleted from the source directory.

"Bleed" sets the border during automatic cropping.

"Expose left frame": When activated, the left border is exposed to provide more stability for the washer.

"Show Ruler" activates or deactivates the ruler.

When restarting the "Merger", *"Autoload Job"* actuates automatic loading of the last job.

"Archiving Interval:" determines the number of days after which the HTML overview files and the files of the directory "Mergelog" are archived in a ZIP file.

"JDF Server": Enter IP number or computer name of JDF server.

"Autoplace mode:" Sets the method (mode) of how the images are automatically arranged on the work surface. The fast, space-optimised and cut-optimised methods are available.

In most cases, the fast positioning method is sufficient. The space-optimised method will continue trying to position the images until the maximum time "Timeout" is reached. The cut-optimised method places the images so that the plates can be subsequently better cut by hand.

"Auto Rotate" activates the rotation during automatic positioning to save more space.

In the *"Folder"* window, the preset output directories can be changed.

The job information is saved in the *"HTM Target Folder"* directory.

Under *"Plugins"*, the minimum size for *"Microcross"* and *"Centerline"* images can be entered. The images are automatically enlarged to this size.

The "Merger" must be restarted after any change.

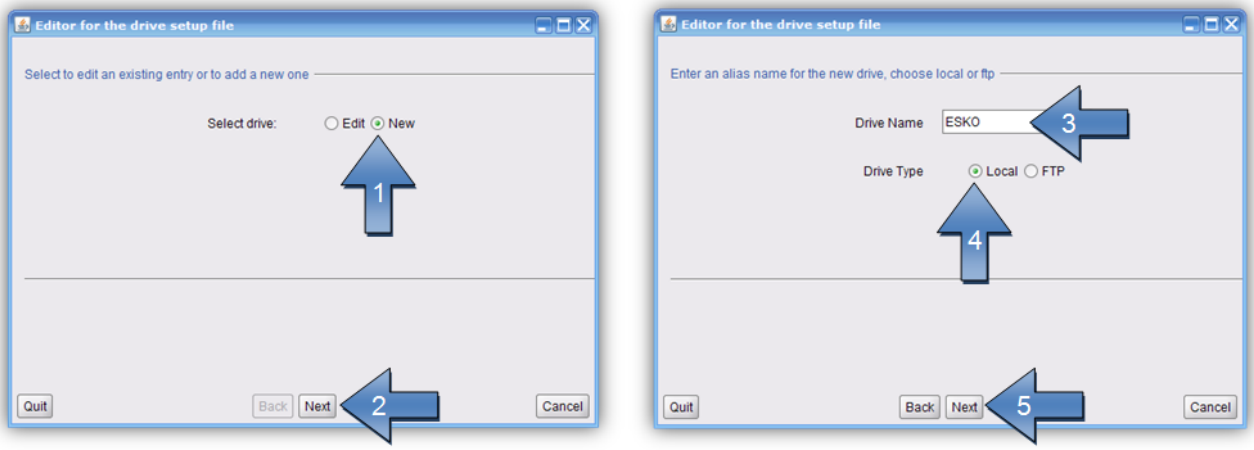
8 Managing Data Sources

The image data can be loaded from the local hard drive, over a network release, or via FTP. With regard to data security, transmission via FTP protocol is to be preferred over network release.

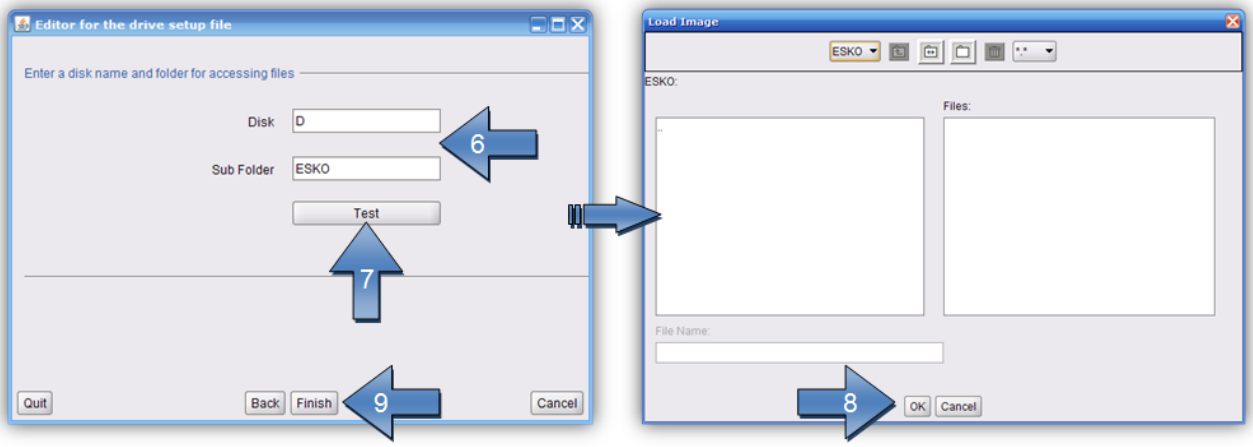
The path entered during installation for the *"User Data"* is already released as a network drive. Additional data sources can be set up under "Edit – Data Source".

8.1 Adding a Local Data Source

Local data sources can be located on the hard drive of the computer or accessible in the network via "share" function.



The name of the data source *"Drive Name"* (3) will be shown later in the "Load" dialogue.

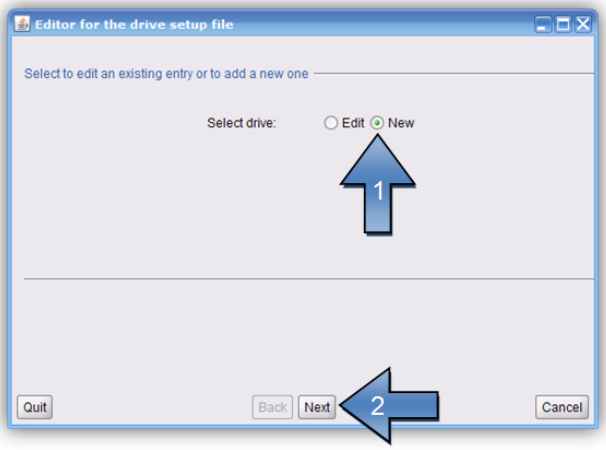


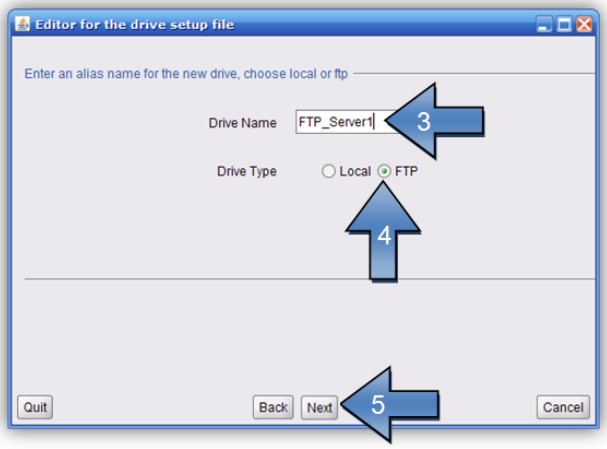
"Disk" and *"Sub Folder"* (6) designate the drive letter and the directory containing the data.

Clicking "Test" (7) opens a new window with the data source set up. "Finish" (9) completes the process. You can always switch to the previous page by pressing *"Back"*.

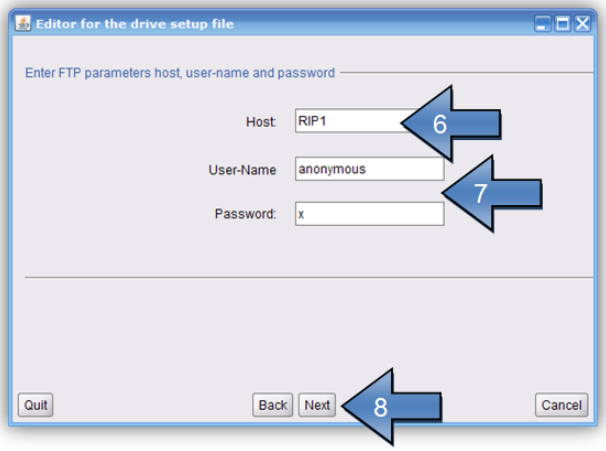
8.2 Adding an FTP Data Source

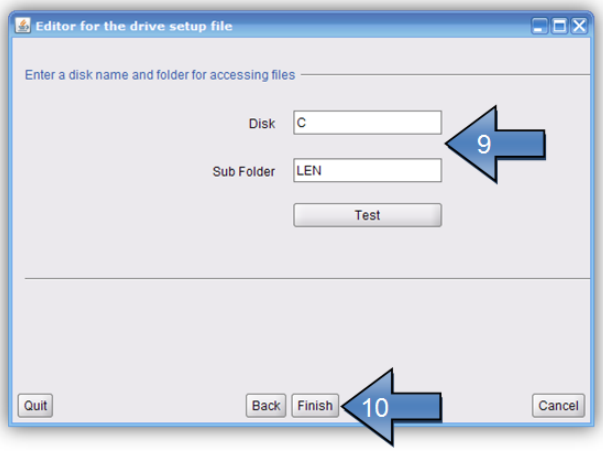
The FTP server of the data source requires a virtual directory. For a detailed installation manual, refer to *"Digital Flexo Suite 101 Installation"*.





The name of the data source *"Drive Name"* (3) will be shown later in the "Load" dialogue.





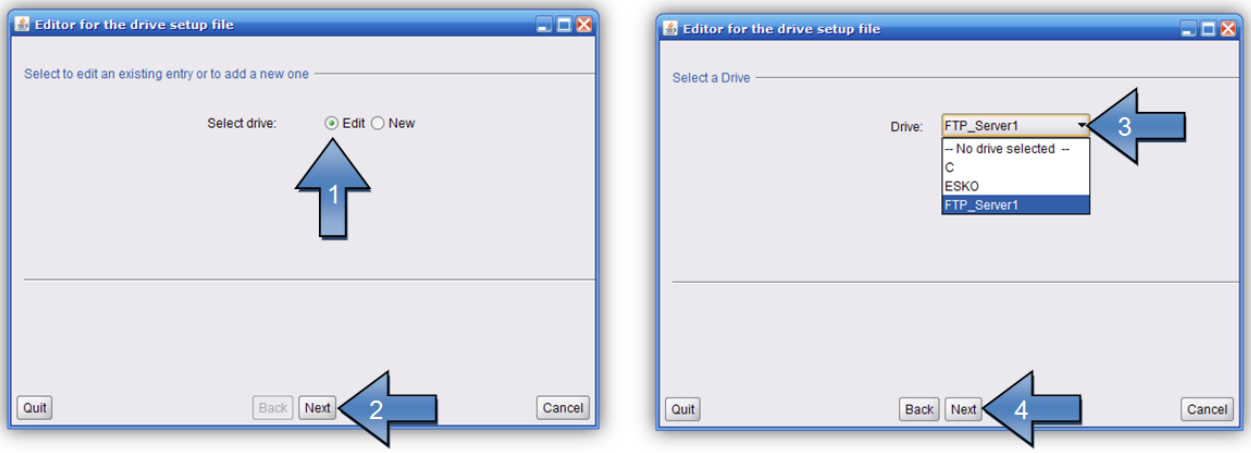
Enter the IP address or the network name in the *"Host"* field (6). Enter the *"User-Name"* (7) and the *"Password"* (7) as shown in the illustration if the FTP server was installed as specified.

"Disk" and *"Sub Folder"* (9) designate the virtual drive and the directory containing the data. Should no virtual directory be available, leave the *"Disk"* field empty.

Clicking "Test" opens a new window with the data source set up. "Finish" completes the process. You can always switch to the previous page by pressing *"Back"*.

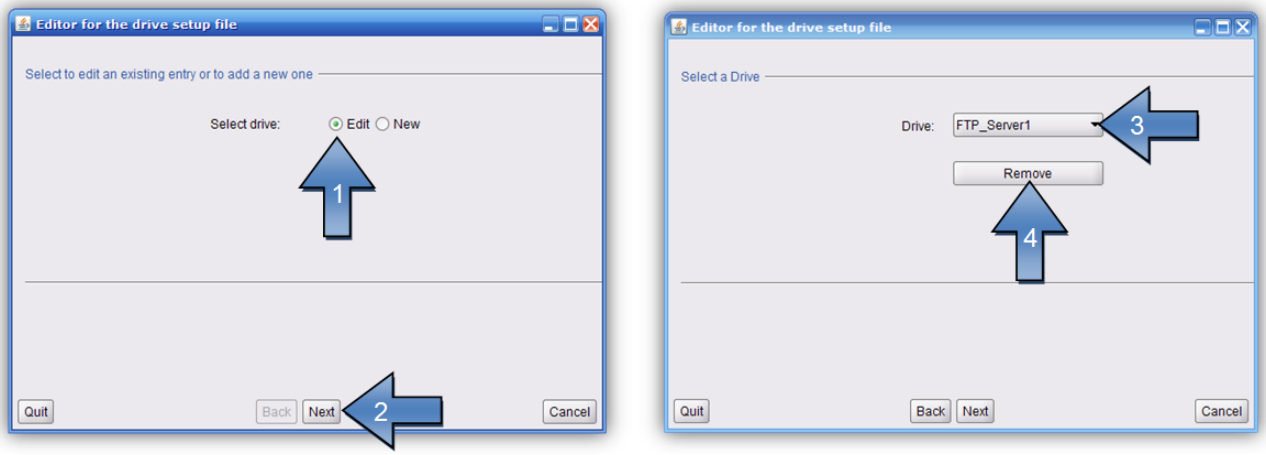
8.3 Changing an Entry

The settings of the data source can be subsequently changed.



After selecting the *"Drive"* (3), you can change the following settings.

8.4 Deleting an Entry



After selecting the *"Drive"* (3), you can remove it by pressing *"Remove"* (4).

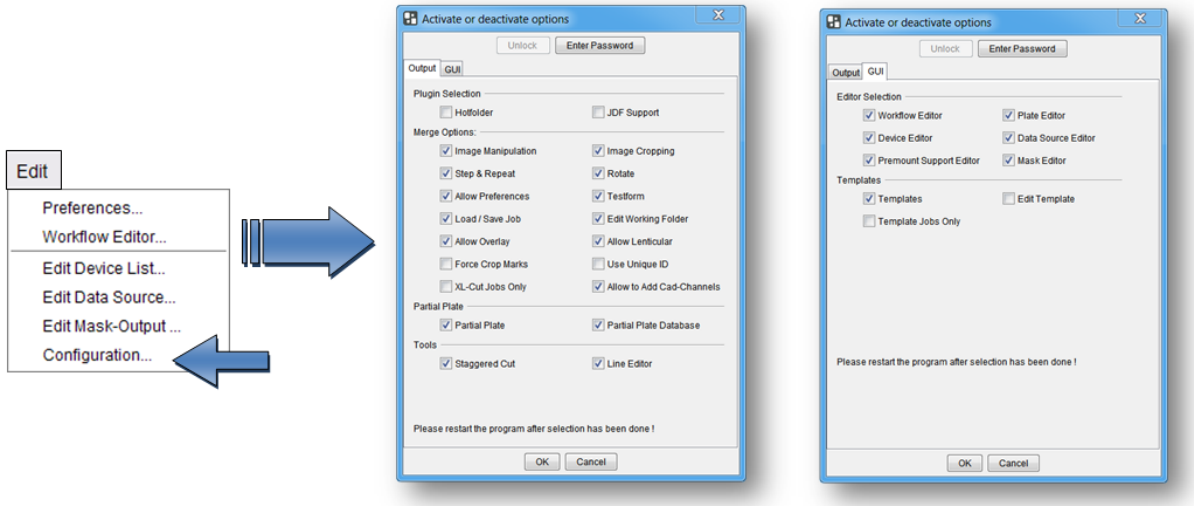
8.5 Saving Settings

Exiting via *"Quit"*, a new window opens requesting whether you want to overwrite the current settings.

Pressing *"OK"* saves the current settings.

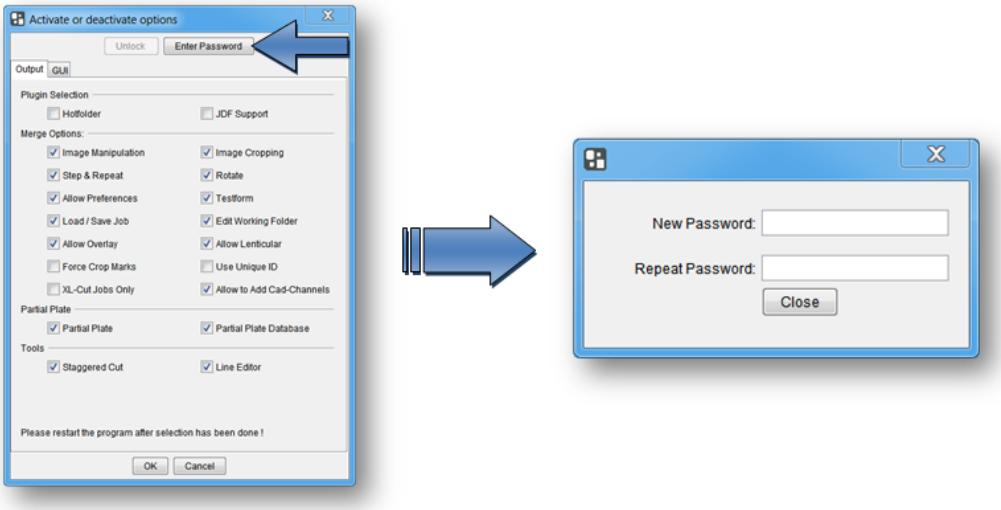
9 Adjusting the "Merger" User Interface

The user interface and some of the functions of the "Merger" can be customised and protected with a password (*"Edit – Configuration"*):



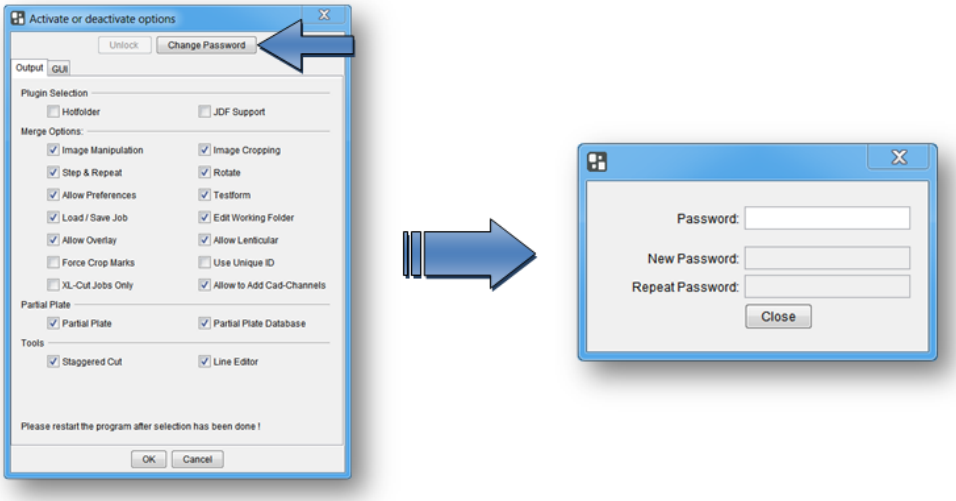
9.1 Password-Protecting Functions

Left-clicking on *"Enter Password"* opens a new window in which the password is entered twice and confirmed with *"Close"*:



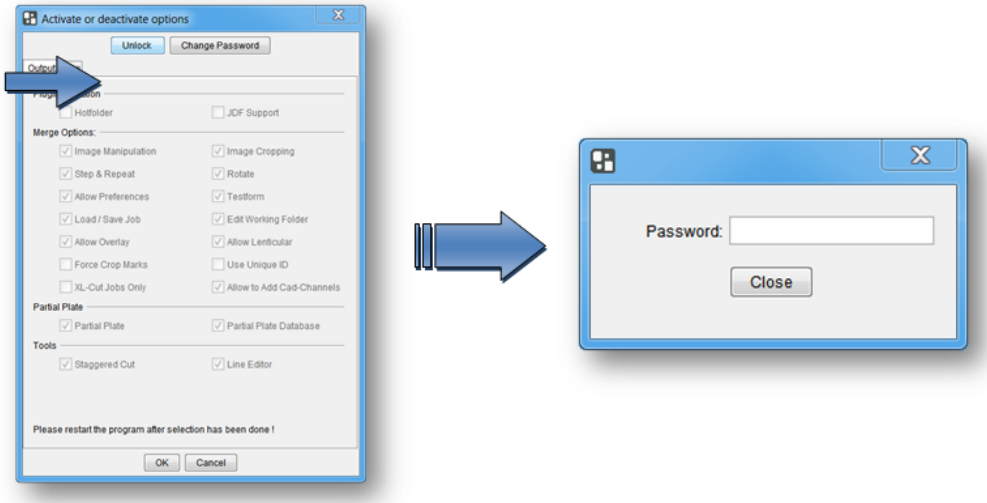
9.2 Changing the Password

Left-clicking on *"Change Password"* opens a new window in which the current password is entered once and the new password is entered twice. "Close" confirms the input:



9.3 Entering a Password to Change Settings

Left-clicking on *"Unlock"* opens a new window in which the current password is entered. "Close" confirms the input and enables the input mask:



10 Support

To contact ESKO, please visit www.esko.com.